

REMARKS

Claims 11 and 21-23 have been amended. Proper support for the amendment to claim 1 can be found in the specification at least at page 12. Claims 11-24 are pending and under consideration. Claim 11 is the independent claim. No new matter is presented in this Amendment and entry and reconsideration are respectfully requested.

As a result, entry of the forgoing amendment is proper under 37 C.F.R. §1.116(b) because these amendments simply respond to the issues raised in the final rejection, and the foregoing amendments are believed to remove the basis of the outstanding rejections, and to place all claims in condition for allowance.

REJECTIONS UNDER 35 U.S.C. §112:

Claims 11-24 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Independent claim 11 has been amended to correct the minor informality noted by the Examiner. Accordingly, Applicants respectfully submit that claim 11 as amended complies with the requirements of 35 U.S.C. §112, first paragraph and therefore request that the rejection of independent claim 11 be withdrawn.

Claims 12-24 depend from independent claim 11 and were rejected because of their dependency. As noted above, claim 11 has been amended to correct the minor informality noted by the Examiner and thus claims 12-24 also comply with the requirements of 35 U.S.C. §112, first paragraph. Accordingly, Applicants request that the rejection of claims 12-24 be withdrawn.

Claims 11-24 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 11 has been amended to correct the minor informality noted by the Examiner. Accordingly, Applicants respectfully submit that claim 11 as amended complies with the requirements of 35 U.S.C. §112, second paragraph and therefore request that the rejection of independent claim 11 be withdrawn.

Claims 12-24 depend from independent claim 11 and were rejected because of their dependency. As noted above, claim 11 has been amended to correct the minor informality noted by the Examiner and thus claims 12-24 also comply with the requirements of 35 U.S.C. §112, second paragraph. Accordingly, Applicants request that the rejection of claims 12-24 be withdrawn.

REJECTIONS UNDER 35 U.S.C. §102:

Claims 11-20 are rejected under 35 U.S.C. §102(a) or (e) as being anticipated by Kweon et al (U.S. Patent 6,183,911).

Applicants respectfully traverse this rejection for at least the following reason.

Regarding the rejection of independent claim 11, it is noted that claim 11 recites a method of preparing a positive active material for a rechargeable lithium battery comprising: coating at least one lithiated compound with an organic solution of coating material source or an aqueous solution of coating material source to produce a coated lithiated compound; drying the coated lithiated compound forming the positive active material for the rechargeable lithium battery, without further heat-treating the dried coated lithiated compound.

Kweon discloses a positive active material for rechargeable lithium batteries and a method of preparing the same (column 1, lines 7-11). The method includes obtaining a powder from a source material and coating the powder with a vanadium pentoxide aqueous solution or a V_2O_5 alcoholic solution to make a V_2O_5 solution-coated powder. Thereafter, the V_2O_5 solution-coated powder is **heat-treated** to prepare a V_2O_5 coated active material (column 1, lines 50-63).

In other words, Kweon discloses a method for forming a positive active material which includes the steps of mixing the powder, removing the solvent and then drying the compound. Thereafter, the dried compound is **heat-treated** and only after the compound is heat treated is the positive active material formed. Therefore, Kweon discloses a method for forming a positive active material along the lines as the one disclosed in the conventional art (see specification at page 12, lines 11-24), where the procedure includes a mixing step, a solvent removing step a drying step and thereafter a **heat-treating step**.

Contrary to Kweon, claim 11 recites, amongst other novel features, drying the coated lithiated compound forming the positive active material for the rechargeable lithium battery,

without further heat-treating the dried coated lithiated compound. In other words, the method recited in independent claim 11, forms the positive active material without the need of heat-treating the dried lithiated compound, and thus omitting the heat-treating process altogether.

As noted above, Kweon requires that the dried compound be heat-treated to form the positive active material.

Furthermore, by drying the coated lithiated compound and without further heat-treating the dried coated lithiated compound, as recited in independent claim 11, a positive active material is obtained which exhibits good cycle life characteristics, discharge potential, and power (see specification, page 14, line 18 through page 15, line 6). Kweon on the other hand is silent with respect to such effects, since Kweon, as noted above, performs a heat treating process.

Accordingly, Applicants respectfully assert that the rejection of claim 11 under 35 U.S.C. § 102(a) or (e) should be withdrawn because Kweon fails to teach or suggest each feature of independent claim 11, as amended.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 12-20 under 35 U.S.C. § 102(a) or (e) should be withdrawn at least because of their dependence from claim 11 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 12-20 also distinguish over the prior art.

Claims 11, 12, 15, 17, and 18 are rejected under 35 U.S.C. §102(b) as being anticipated by Wang (U.S. Patent 5,783,328).

Applicants respectfully traverse this rejection for at least the following reason.

Regarding the rejection of independent claim 11, it is noted that claim 11 recites a method of preparing a positive active material for a rechargeable lithium battery comprising: coating at least one lithiated compound with an organic solution of coating material source or an aqueous solution of coating material source to produce a coated lithiated compound; and drying the coated lithiated compound forming the positive active material for the rechargeable lithium battery, without further heat-treating the dried coated lithiated compound.

Wang discloses a method of treating lithium manganese oxide. The method includes immersing in a lithium hydroxide solution at ambient temperature, lithium manganese oxide

powder and stirring the mixture for sufficient time to saturate the powder with hydroxide. The solution is heated to evaporate substantially all the water contained therein leaving behind lithium hydroxide coated particles. The lithium hydroxide coated powder is exposed to an environment of carbon dioxide at a temperature between 200°C and 700°C. Such treatment removes any residual moisture from the coated powder (column 2, lines 30-44).

In other words, Wang discloses a method for forming a positive active material by mixing a powder, removing the solvent from the saturated powder to obtain a compound and then drying the compound. Thereafter, the dried compound is heat-treated and only after the compound is heat treated is the positive active material formed. Therefore, Wang discloses a method for forming a positive active material along the lines as the one disclosed in the conventional art (see specification at page 12, lines 11-24), where the procedure includes a mixing step, a solvent removing step, a drying step and thereafter a heat-treating step.

Contrary to Wang, claim 11 recites, amongst other novel features, drying the coated lithiated compound forming the positive active material for the rechargeable lithium battery, without further heat-treating the dried coated lithiated compound. In other words, the method recited in independent claim 11, forms the positive active material without the need of heat-treating the dried lithiated compound, and thus omitting the heat-treating process altogether.

Furthermore, as noted above, by drying the coated lithiated compound and without further heat-treating the dried coated lithiated compound, as recited in independent claim 11, a positive active material is obtained which exhibits good cycle life characteristics, discharge potential, and power. Wang on the other hand is silent with respect to such effects, since Wang, as noted above, performs a heat treating process.

Accordingly, Applicants respectfully assert that the rejection of claim 11 under 35 U.S.C. § 102(b) should be withdrawn because Wang fails to teach or suggest each feature of independent claim 11, as amended.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 12, 15, 17 and 18 under 35 U.S.C. § 102(b) should be withdrawn at least because of their dependence from claim 11 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 12, 15, 17 and 18 also distinguish over the prior art.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 21-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Wang.

Claims 21-24 depend from independent claim 11 and as noted above, Wang fails to teach or suggest each feature of independent claim 11.

Applicants respectfully assert that the rejection of dependent claims 21-24 under 35 U.S.C. § 103(a) should be withdrawn at least because of their dependence from claim 11 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 21-24 also distinguish over the prior art.

DOUBLE PATENTING

Claims 11-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent Nos. 6,372,385; 6,183,911; 6,756,155; 6,531,220; 6,653,021; 6,753,111; 6,797,435; and 6,846,5952.

Applicants respectfully traverse this rejection for at least the following reason.

The active materials recited in the references have the metal oxide coating formed by heat-treating, which is different from the coating obtained without heat-treating of the present application. Accordingly, Applicants respectfully request that the rejection of claims 11-24 be withdrawn.

Furthermore, since claims 11-24 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer would be premature (see MPEP 804).

Claims 11-20 and 24 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application Nos. 09/429262, 09/963872, 09/966572, 10/808034, and 10/944892.

Applicants respectfully traverse this rejection for at least the following reason.

The active materials recited in the references have the metal oxide coating formed by

heat-treating, which is different from the coating obtained without heat-treating of the present application. Accordingly, Applicants respectfully request that the rejection of claims 11-24 be withdrawn.

Furthermore, since claims 11-20 and 24 of the instant application have not yet been indicated as allowable, it is believed that any submission of a Terminal Disclaimer would be premature (see MPEP 804).

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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